

Application Serial No.: 09/783,410  
Amendment dated: December 19, 2003

Reply to Office action of: September 25, 2003  
Attorney Docket No.: ARC9200000105US1

**Amendments to the Claims:**

This listing of claims will replace all prior versions and listings of claims in this application:

**Listing of Claims:**

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1. (Currently amended) A method of providing a shopping proposal that enhances a merchant's existing database system, comprising:

analyzing a catalog of items in the existing database system based on a set of predefined rules that correlate the items under certain conditions, to determine which of the items in the catalog are related to other items in the catalog, and to define a new set of relations between the catalog items;

wherein each rule comprises an evidence and a conclusion, and leads to new associations between the catalogue items;

applying the new set of relations to the existing database system to update the database system by providing the new associations of the items in the database system;

generating a shopping advisor knowledge database that comprises the new associations for each item of the existing database system; and

offering automated, dynamic, and personalized shopping advice to the shopper based on a shopper query, by retrieving [[links]] the new associations in the shopping advisor knowledge database, and [[to]] items from the existing database system that have been related by the new associations.

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2. (Original) The method according to claim 1, wherein analyzing the catalog of items in the existing database system is based on a set of predefined rules for a given line of items.

3. (Original) The method according to claim 1, wherein defining the new set of relations includes defining a set of properties for the catalog items.

4. (Original) The method according to claim 3, wherein defining a set of properties includes defining and one or more of color, size, or category.

5. (Original) The method according to claim 4, wherein applying the new set of relations includes assembling catalog items based on a set of predefined rules that is independent of the merchant's industry.

6. (Original) The method according to claim 5, wherein applying the new set of relations includes using an intermediate format to list items that have been related by the new associations.

7. (Original) The method according to claim 1, further including using additional information available during a shopping session.

8. (Original) The method according to claim 7, wherein using additional information includes using information based on any one or more of: the shopper's browsing history or previous purchases.

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9. (Currently amended) A shopping server proposal system that enhances a merchant's existing database system, comprising:

a terminology conversion module that communicates with the existing database system, and having as input a ruleset, for outputting a terms mapping document that maps terms of the database system to terms of the ruleset;

an analysis and relation creation module connected to the terminology conversion module for receiving the terms mapping document and for analyzing a catalog of items in the existing database system based on the terms mapping document, to determine which of the items in the catalog are related to other items in the catalog, and to define a new set of relations between the catalog items;

wherein each rule in the ruleset comprises an evidence and a conclusion that leads to new associations between the catalogue items, and that correlates the items under certain conditions;

the analysis and relation creation module further applying the new set of relations to the existing database system to update the database system by providing the new associations of the items in the database system;

a shopping advisor knowledge database that comprises the new associations for each item of the existing database system; and

a shopping server that offers an automated, dynamic, and personalized shopping advice to the shopper based on a shopper query, by retrieving [[links]] the new associations in the shopping advisor knowledge database, and [[to]] items from the database system that have been related by the new associations.

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10. (Original) The system according to claim 9, wherein the shopping server includes a request analysis module, a relation finder module, and a response creation module.

11. (Original) The system according to claim 10, wherein the request analysis module receives an incoming request and identifies currently selected items based on the request.

12. (Original) The system according to claim 11, wherein the relation finder module retrieves all related items by issuing a query statement, based on the currently selected items identified by the request analysis module.

13. (Original) The system according to claim 12, wherein the relation finder module retrieves a result set of related items from the database system that includes references to the related items and to all attributes of the related items.

14. (Original) The system according to claim 13, wherein the relation finder module delivers the result set to the response creation module.

15. (Original) The system according to claim 14, wherein the response creation module creates a dynamic response to the incoming request based on the result set of related items.

16. (Original) The system according to claim 15, wherein the dynamic response is rendered in a browsable form.

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17. (Currently amended) A computer program product for enhancing a merchant's existing database system, comprising:

a terminology conversion module that communicates with the existing database system, and having as input a ruleset, for outputting a terms mapping document that maps terms of the database system to terms of the ruleset;

an analysis and relation creation module connected to the terminology conversion module for receiving the terms mapping document and for analyzing a catalog of items in the existing database system based on the terms mapping document, to determine which of the items in the catalog are related to other items in the catalog, and to define a new set of relations between the catalog items;

wherein each rule in the ruleset comprises an evidence and a conclusion that leads to new associations between the catalogue items, and that correlates the items under certain conditions;

the analysis and relation creation module further applying the new set of relations to the existing database system to update the database system by providing the new associations of the items in the database system; and

a shopping advisor knowledge database that comprises the new associations for each item of the existing database system; and

a shopping server that offers an automated, dynamic, personalized shopping advice to the shopper based on a shopper query, by retrieving [[links]] the new associations in the shopping advisor knowledge database, and [[to]] items from the database system that have been related by the new associations.

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18. (Original) The computer program product according to claim 17, wherein the shopping server includes a request analysis module, a relation finder module, and a response creation module.

19. (Original) The computer program product according to claim 18, wherein the request analysis module receives an incoming request and identifies currently selected items based on the request; and

wherein the relation finder module retrieves all related items by issuing a query statement based on the currently selected items identified by the request analysis module.

20. (Original) The computer program product according to claim 19, wherein the relation finder module retrieves a result set of related items from the database system that includes references to the related items and to all attributes of the related items;

wherein the relation finder module delivers the result set to the response creation module;

wherein the response creation module creates a dynamic response to the incoming request based on the result set of related items; and

wherein the dynamic response is rendered in a browsable form.

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